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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,528	01/03/2006	Walter Stieglbauer	STIEGLBAUER W. ET AL-4 PC	1506
25889	7590	12/09/2008	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			JENNISON, BRIAN W	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,528	Applicant(s) STIEGLBAUER ET AL.	
	Examiner BRIAN JENNISON	Art Unit 4184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/10/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/5/2006 11/14/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, Claims 1-10 in the reply filed on 11/10/2008 is acknowledged. The traversal is on the ground(s) that the present invention is directed to a unitary inventive concept, namely spot welding tongs for robotic applications in resistance welding of workpieces and that both groups I and II are believed to not constitute an unreasonable search. This is not found persuasive because the technical feature "spot welding tongs for robotic applications for the resistance welding of workpieces" are known from the prior art (see the rejection of claim 1 below), therefore, this is not a special technical feature as it does not make a contribution over the prior art. Thus, there is a lack of unity because groups I and II do not share the same special technical features. See MPEP 1850 II. DETERMINATION OF "UNITY OF INVENTION"

The requirement is still deemed proper and is therefore made FINAL.

1. Claims 11-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, Group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/10/2008.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. **The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because line 4 of the abstract contains the legal phraseology of "means". In line 9 of the abstract please insert "1" in the brackets. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 5 is objected to because of the following informalities: Lines 1 and 2 of claim 5 recite --according to claims 4--. Please change to --according to claim 4--since the claim only depends on one claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Erras et al (DE 44 16 504 as cited by applicant).

Erras et al teaches:

Regarding Claim 1: Spot welding tongs for robotic applications

for the resistance welding of workpieces and, in particular, sheet metals, (**“robot-led welding tongs” used to perform resistance welding See Paragraph 7, Line 13 of machine translation provided**) of the type including tong arms which are each pivotally mounted on a base body (**Tongs are defined as any of various implements consisting of two arms hinged, pivoted, or otherwise fastened together, for seizing, or holding**) and adjustable by an actuating means (**Since the tongs are robotic they must include an actuating means for moving the tongs to perform the welding**) and to which electrode holders for the electrodes (**See Fig. 2 which shows the electrode holder 1 and the electrode cap 4**) are fastened, and further including winding means comprising a wind-off roller and a wind-up roller for winding off and on a strip for the protection of at least one electrode, (**See Paragraph 12 which describes the coil 9a for unwinding the strip 10 and the coil 9b for winding up the strip 10 for protecting the electrode.**) wherein the wind-off roller and the wind-up roller (ii) of the winding means are arranged on the base body or on the tong arm, (**the**

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coils 9a and 9b are capable of being arranged on the tong arms 2) and that at least one guiding groove is provided on the tong arm and/or on the electrode holder for the guidance of the strip along the tong arm. (See Fig 3 which shows the recess 7 for guiding the strip section 5 along the tong arm 2. See also Paragraph 11, Line 1)

Regarding Claim 3: Spot welding tongs according claim 1, wherein the wind-off roller and/or the wind-up roller is coupled with a driving means and, in particular, an electronically activatable motor. **(The coils 9a and 9b are operated by a driving mechanism for feeding the strip 10. See Paragraph 7, Lines 10-11)**

Regarding Claim 4: Spot welding tongs according to claim 1, wherein the tong arm is formed by a base section, and that side pieces are arranged on either side of the base section to project beyond the base section, and thus formed depression is designed as a guiding groove for the strip. **(Fig 3 shows a recess 7 in the base of the arm which is formed by two sides extending beyond the base section)**

Regarding Claim 5: Spot welding tongs according to claim 4, wherein at least one cover plate is arranged on the end sides of the side pieces to cover the guiding groove formed between the side pieces. **(The receptacles 8, as seen in Fig 4, cover the recess 7 and are arranged on the end of the sides which extend beyond the base to form the recess 7)**

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Regarding Claim 6: Spot welding tongs according to claim 1, wherein the tong arm is formed by a base section with the guiding groove being incorporated in the base section. **(Fig 3 shows a recess 7 in the base of the arm which is formed by two sides extending beyond the base section)**

Regarding Claim 7: Spot welding tongs according to claim 1, wherein the guiding groove is formed by additional guiding elements which are provided, for instance slipped or screwed, on the tong arm and/or electrode holder.

(The receptacles 8, as seen in Fig 4, form a u-shaped groove which cover the recess 7 and are part of the groove or recess for guiding the strip over the electrode.)

Regarding Claim 8: Spot welding tongs according to claim 1, wherein the tong arm is 'comprised of several individual components which are connected with one another in a manner that a hollow space is formed in the center of the tong arm for the guidance of the strip. **(The receptacles 8, as seen in Fig 4, are provided for forming a hollow section on the tong arms for guiding the strip. See Paragraph 11, Lines 5-6)**

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erras et al in view of applicant admitted prior art.

Erras et al fails to teach (re claim 2) Spot welding tongs according to claim 1, wherein means for guiding and deflecting the strip, in particular deflection pulleys and slide surface, are provided on the tong arm and/or electrode holder.

The applicant admits a device is known wherein a roller or pulley for deflecting the strip is arranged on the electrode shaft. **(See Paragraph 3, Lines 11-14 of the specification)**

In view of the applicant's admitted prior art it would have been obvious to one of ordinary skill in the art at the time of the invention to include, the roller or pulley, arranged on the electrode shaft which is part of the tong arm, for deflecting the strip over the electrode since, the applicant admits this for deflecting the strip from the wind off coil and placing the strip in a transverse position to protect the electrode.

9. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erras et al in view of Nishimura (JP 05192774 as cited by applicant).

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Erras et al fails to teach (re claim 9) Spot welding tongs according to claim 1, wherein a braking device is provided to fix and stretch the strip. (re claim 10) Spot welding tongs according to claim 9, wherein the braking device is connected with a control unit.

Nishimura teaches (re claim 9) The 1st rolling-up means 31 is attached to the upper electrode 5 side of the welding gun 1. The 1st rolling-up means 31 comprises the stepping motor 32, the torque sensor 33, the connecting shaft 34, and the driven shaft 35. The torque sensor 33 is connected with the output shaft of the stepping motor 32. **(See Paragraph 25, Lines 1-3)** The torque sensor allows the motor to function as a brake capable of fixing and stretching the strip, if the wind up motor is running when the wind off motor is stopped, in a spot resistance welding device. (re claim 10) Drive controlling of the stepping motor 32 is carried out by the control means 81. **(See Paragraph 25, Line 7)** The control unit stops and starts each motor and reel.

In view of Nishimura's teachings it would have been obvious to one of ordinary skill in the art at the time of the invention to include, the brake and controlling unit since, Nishimura teaches a device including, a torque sensor, stepping motor, connecting shaft and driven shaft, functioning as a brake since, Nishimura teaches these devices for detecting and fixing abnormalities of the band which protects the welding electrode.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Suita (US 2001/0045413) teaches a welding gun with a servo motor.

Jeon (US 7,012,213) teaches a reel wire welding device for spot welding.

Denis (US 3,430,027) teaches a resistance welding machine.

Renshaw et al (US 4,545,519) teaches an apparatus for preventing tip sticking during welding operation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN JENNISON whose telephone number is (571)270-5930. The examiner can normally be reached on M-Th 7:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached on 571-272-2391. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN JENNISON/
Examiner, Art Unit 4184

/Jared J. Fureman/
Supervisory Patent Examiner, Art
Unit 4184

December 8, 2008